

#2

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/829,481

DATE: 04/23/2001  
TIME: 13:25:47

Input Set : A:\BB1441 US NA Seq Listing.txt  
Output Set: N:\CRF3\04232001\I829481.raw

2 <110> APPLICANT: Presnail, James  
 3 Weng, Zude  
 4 Wong, James  
 6 <120> TITLE OF INVENTION: Arthropod Defensins  
 8 <130> FILE REFERENCE: BB1441 US NA  
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/829,481  
 C--> 11 <141> CURRENT FILING DATE: 2001-04-10  
 13 <150> PRIOR APPLICATION NUMBER: 60/197279  
 14 <151> PRIOR FILING DATE: 2000-04-14  
 16 <160> NUMBER OF SEQ ID NOS: 11  
 18 <170> SOFTWARE: Microsoft Office 97  
 20 <210> SEQ ID NO: 1  
 21 <211> LENGTH: 461  
 22 <212> TYPE: DNA  
 23 <213> ORGANISM: Scolopendra canidens DS  
 25 <220> FEATURE:  
 26 <221> NAME/KEY: unsure /  
 27 <222> LOCATION: (408)  
 29 <220> FEATURE:  
 30 <221> NAME/KEY: unsure /  
 31 <222> LOCATION: (439)  
 33 <220> FEATURE:  
 34 <221> NAME/KEY: unsure  
 35 <222> LOCATION: (455)  
 37 <400> SEQUENCE: 1  
 38 gcaatttcaa aatttttttc ttcttttct ttacgcagtg ctcggcaaca tgaagactgt 60  
 39 gtatgttate ttcttagttg ctcttttgtt attagcatta gctggaacctt acgtggaaagc 120  
 40 tggtttcggc tgcccccggg accaatatga atgcaataga cattgcaggg gtaatggatt 180  
 41 tactgggggt tactgcactg gatttctgaa gttcacgtgt aaatgctaca catgatcaaa 240  
 42 atatgatttt ctggcagttc tccaatttca acaaagggtc tacaacagtc tacagtaaaa 300  
 43 tagaaaaattt cgaatctac agccttgac tcacattaaat acctttggaa tgtoattgaa 360  
 W--> 44 atttgcattg ttaataataa tacatgtttg gttttttca gagaataantt tatagaaaca 420  
 W--> 45 aaatttttaa ataaaatggnt ataatttgaa taaañaaaaa a 461  
 47 <210> SEQ ID NO: 2  
 48 <211> LENGTH: 61  
 49 <212> TYPE: PRT  
 50 <213> ORGANISM: Scolopendra canidens DS  
 52 <400> SEQUENCE: 2  
 53 Met Lys Thr Val Tyr Val Ile Phe Leu Val Ala Leu Leu Val Leu Ala  
 54 1 5 10 15  
 55 Leu Ala Gly Thr Tyr Val Glu Ala Gly Phe Gly Cys Pro Gly Asp Gln  
 56 20 25 30  
 57 Tyr Glu Cys Asn Arg His Cys Arg Gly Asn Gly Phe Thr Gly Gly Tyr  
 58 35 40 45  
 59 Cys Thr Gly Phe Leu Lys Phe Thr Cys Lys Cys Tyr Thr  
 60 50 55 60  
 62 <210> SEQ ID NO: 3

ENTERED

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63 <211> LENGTH: 406
64 <212> TYPE: DNA
65 <213> ORGANISM: Vaejovis carolinianus
67 <400> SEQUENCE: 3
68 ctctactaca atcactaagt tccttctcca ctcagcttca agaatgaaat ccatacgat 60
69 tttttcattt gttcttggtt cttctgtat ttggaggat gggattgttag aagctgggtt 120
70 tggatgtccc tttaatgcag gaaaatgcga tagacattgc aaaagtattc gtctgttaggg 180
71 aggctttgc agaggaacctt tcaggacaac ctgcgtttgc tataaggtaa aatccgattt 240
72 atttgcata atggagaccc gtttttattt aatatcgtaa gtttccaatt aaagtcat 300
73 cgagccatac tgaataattt tgtaatctaa caacagatgc aatagttaa ataaacttat 360
74 acttaacttt taaaaaaaaaaaaaaa aaaaaaaaaaaaaaaa aaaaaaaaaaaaaaaa 406
76 <210> SEQ ID NO: 4
77 <211> LENGTH: 61
78 <212> TYPE: PRT
79 <213> ORGANISM: Vaejovis carolinianus
81 <400> SEQUENCE: 4
82 Met Lys Ser Ile Ala Ile Ile Phe Ile Val Leu Val Ala Phe Cys Ile
83      1           5           10          15
84 Leu Glu Asp Gly Ile Val Glu Ala Gly Phe Gly Cys Pro Phe Asn Ala
85      20          25          30
86 Gly Lys Cys His Arg His Cys Lys Ser Ile Arg Arg Arg Gly Gly Phe
87      35          40          45
88 Cys Arg Gly Thr Phe Arg Thr Thr Cys Val Cys Tyr Arg
89      50          55          60
91 <210> SEQ ID NO: 5
92 <211> LENGTH: 386
93 <212> TYPE: DNA
94 <213> ORGANISM: Argiope sp.
96 <220> FEATURE:
97 <221> NAME/KEY: unsure/
98 <222> LOCATION: (351)
100 <220> FEATURE:
101 <221> NAME/KEY: unsure /
102 <222> LOCATION: (364)..(365)
104 <220> FEATURE:
105 <221> NAME/KEY: unsure /
106 <222> LOCATION: (386)
108 <400> SEQUENCE: 5
109 catttccaaa aaaatgaatg cgagagtcct gttgttgate tcgcctagtcg tctgtgctt 60
110 tgccacagtg gccgtgaaag ctggttcgg ctgccttc gaccagatgc agtgtcacaa 120
111 tcattgcagg agcatcaa atacgcacc aacttattca agcgcaccc 180
112 caagtgttac ggatgtatgc cccctcccc tctcagacag gagcccacac ctttcattga 240
113 catccgattt cgttttcca aatgcaattt gtaacacatg atgaatttga tgcaagtgcc 300
W--> 114 ttaaatttaa ataaatttga ttacattt taaaaaaaaaaaaaaa naaaaaaaaaaa 360
W--> 115 aaaaaaaaaaaaaaaa aaaaaaaaaaaa aaaaaan' 386
117 <210> SEQ ID NO: 6
118 <211> LENGTH: 60
119 <212> TYPE: PRT
120 <213> ORGANISM: Argiope sp.

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122 <400> SEQUENCE: 6  
123 Met Asn Ala Arg Val Leu Leu Leu Ile Cys Leu Val Val Cys Ala Phe  
124 1 5 10 15  
125 Ala Thr Val Ala Val Glu Ala Gly Phe Gly Cys Pro Phe Asp Gln Met  
126 20 25 30  
127 Gln Cys His Asn His Cys Arg Ser Ile Lys Tyr Arg Gly Gly Tyr Cys  
128 35 40 45  
129 Thr Asn Leu Phe Lys Arg Thr Cys Lys Cys Tyr Gly  
130 50 55 60  
132 <210> SEQ ID NO: 7  
133 <211> LENGTH: 351  
134 <212> TYPE: DNA  
135 <213> ORGANISM: Argiope sp.  
137 <400> SEQUENCE: 7  
138 cttgggttctg tcgacatttc caaaaaaatg aatgcgagag ttctgtgtt gatctgccta 60  
139 gtcgtctgtc cttttgcac agtgaccgtg gaagctgggt tcggctgcc 120  
140 atgcagtgtc acaatcattc caggagcatc aaatataggg gaggatactg cacaactta 180  
141 ttcaagcgca cctgcaagtg ttacggatga tgaccccccct cccctctcag acaggagccc 240  
142 tcacctttca ctgacatccg attccgattt tccaaatgca aattgttaaca catgatgaat 300  
143 ttgattcaag tgcccttaaa tttaaataaa ttgtatcca cattttaaaa a 351  
145 <210> SEQ ID NO: 8  
146 <211> LENGTH: 60  
147 <212> TYPE: PRT  
148 <213> ORGANISM: Argiope sp.  
150 <400> SEQUENCE: 8  
151 Met Asn Ala Arg Val Leu Leu Leu Ile Cys Leu Val Val Cys Ala Phe  
152 1 5 10 15  
153 Ala Thr Val Thr Val Glu Ala Gly Phe Gly Cys Pro Phe Asp Gln Met  
154 20 25 30  
155 Gln Cys His Asn His Cys Arg Ser Ile Lys Tyr Arg Gly Gly Tyr Cys  
156 35 40 45  
157 Thr Asn Leu Phe Lys Arg Thr Cys Lys Cys Tyr Gly  
158 50 55 60  
160 <210> SEQ ID NO: 9  
161 <211> LENGTH: 537  
162 <212> TYPE: DNA  
163 <213> ORGANISM: Argiope sp.  
165 <220> FEATURE:  
166 <221> NAME/KEY: unsure/  
167 <222> LOCATION: (429)  
169 <220> FEATURE:  
170 <221> NAME/KEY: unsure/  
171 <222> LOCATION: (498)  
173 <220> FEATURE:  
174 <221> NAME/KEY: unsure,  
175 <222> LOCATION: (524)  
177 <400> SEQUENCE: 9  
178 tttatctatt ttttgatgtg cgtgactttc atcatggctc tttcgatcc cccacttgt 60  
179 gatgcaggat tcgggtgtcc tttctgccaa gggaaatgta accttcactg caagcacgtg 120

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180 gtcaaggcaa gggccggatt ttgcacaggt gctttcaaac aaacctgcaa atgcaaccga 180  
181 tgattacctt tccagacaac atgaaacacg gacgatggtg ctaactttat ccagacatcg 240  
182 gatgccggat taatgatatt acactgaaat gttcatttaa tgtataccctt ttaagattt 300  
183 aaaggcagtg atgatTTAT ttaatatta agttgtacaa gtaacattct aagcaaaataa 360  
184 aaataagatt tacgtttttt ttttttttaaaaataaaa ttatggc cttccgtac 420  
W--> 185 tgaataaaana taactaaaag atagaacaa tccgggttac accgatttga actcaaatca 480  
W--> 186 tgaatgttt taaagggncg acaagaccta cttttaaaat tacngatcg taaagtt 537  
188 <210> SEQ ID NO: 10  
189 <211> LENGTH: 55  
190 <212> TYPE: PRT  
191 <213> ORGANISM: Argiope sp.  
193 <400> SEQUENCE: 10  
194 Met Cys Val Thr Phe Ile Met Ala Leu Ser Tyr Pro Pro Leu Val Asp  
195 1 5 10 15  
196 Ala Gly Phe Gly Cys Pro Phe Cys Gln Gly Glu Cys Asn Leu His Cys  
197 20 25 30  
198 Lys His Val Val Lys Ala Arg Gly Gly Phe Cys Thr Gly Ala Phe Lys  
199 35 40 45  
200 Gln Thr Cys Lys Cys Asn Arg  
201 50 55  
203 <210> SEQ ID NO: 11  
204 <211> LENGTH: 37  
205 <212> TYPE: PRT  
206 <213> ORGANISM: Androctonus australis hector  
208 <400> SEQUENCE: 11  
209 Gly Phe Gly Cys Pro Phe Asn Gln Gly Ala Cys His Arg His Cys Arg  
210 1 5 10 15  
211 Ser Ile Arg Arg Arg Gly Gly Tyr Cys Ala Gly Leu Phe Lys Gln Thr  
212 20 25 30  
213 Cys Thr Cys Tyr Arg  
214 35  
216 BB1441

**VERIFICATION SUMMARY**

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L:10 M:270 C: Current Application Number differs, Replaced Application Number  
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:44 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:1  
L:44 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:45 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:1  
L:45 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:114 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:5  
L:114 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:115 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:5  
L:115 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:185 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:9  
L:185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9  
L:186 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:9  
L:186 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9